



## Investigation of the Relationship between the Coastal Land Use and Land Ownership: The Case of Hopa

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### Abstract:

*In our country, particularly the Constitution, Civil Code, Cadastre Law, Coastal Law and relevant regulations state that the coasts are under the provision and possession of the government, cannot be subject of private ownership, and are primarily for purpose of the public welfare. However, the legislation in effect both in the Ottoman Empire time and the Republic era (until 1972) enabled the coasts to be subject of private ownership, and privately owned ownerships developed on the coasts under the government guarantee. Also, delays in determination of the "Shore Border Line" (SBL) delimiting the coastal area further caused these areas to be the subject of private ownership. The mentioned problem is also being observed along the coastline of Artvin Province. The SBL determination work was started on the Black Sea coastline of the Artvin province which is about 33 km long, in mid 1970s and completed in the year 2012. During that time private ownerships developed on the coastal area. Besides, due to the construction of the Black Sea coastal roadway, some distortion occurred along the Black Sea coast, destroying the natural shores and causing misuse of land on the coastline. Use of the coasts in line with its potential, free and equal use of them by everyone can only be possible with the coastal planning. Such planning primarily requires identifying how the coasts are currently being utilized, and making the prevailing legislative status of the coasts clear. This study aims to identify the ownership profile along the coastline and to determine the real estates remained on the Black Sea coast of Hopa district of Artvin by infringing the SBL with the use of Geographic Information Systems (GIS). The study, where the use of coastal areas is also being analyzed in terms of landscape, also offers some recommendations to relieve the pressure of the private ownership and public institutions on the coasts; thus, enabling them to be utilized for public interest according to their potential.*

*Key Terms: Coast, use of coastal area, GIS, Hopa.*

### Introduction:

When the legislative status of the coasts in Turkey is analyzed, it is observed that the existing legislation addressing the subject in a very detailed manner mandates that the coasts are under the provision and possession of the government. Article 43 of the Constitution of 1982 entitled "Utilization of the Coasts" states, *"the coasts are under the provision and possession of the government. In the utilization of the sea coast, lake shores or river banks, and of the coastline along the sea and lakes, public welfare shall be taken into consideration with priority. The width of coasts and coastline to be determined according to the purpose of utilization, and the conditions and possibilities of such utilization by individuals shall be determined by law,"* thus stipulating that the coasts cannot be the subject of private ownership and public welfare shall be taken as basis in the use of the coasts and their complementary coastline. Article 715 of the Turkish Civil Code No 4721 which inured in

2001, states, *"un-owned places, and properties which are utilized by public are under the provision and possession of the government. Unless proven otherwise, water utilized by public, non-arable areas such as rocks, hills, glaciers, and resources extracted therefrom are no one's property and cannot be the subject of private ownership by any means",* thus stipulating that the coasts cannot be the subject of private ownership. Again under the same scope, article 14 of the Land Register Law No 2644 and article 16 of the Cadastre Law No 3402 state that coasts are under the provision and possession of the government.

The Coastal Law No 3086 inured in 1984 by virtue of the provision in article 43 of the Constitution of 1982. This law rules that building structures and facilities which aim to protect the coasts based on the plans and facilitate the use of them in the public interest, the facilities which are mandatory to be constructed on the coasts due to nature of their operations, and sports and training

facilities can be built on the coasts, and also enabled private housing development by virtue of the plan decisions approved by the Council of Ministers. However, quite a few major articles in this Law were repealed by the Constitutional Court, and the Circular No 110 of the Ministry of Public Works and Settlement was referred to regarding the applications on the coasts until a new law was issued in 1990 (URL-1 2013). The Coastal Law No 3621 which inured in 1990 to deal with the legislative status of the coasts and the coastal planning, and ruled that the coasts were under the provision and possession of the government and everyone should freely and equally benefit from the coasts. Some of the articles of the subject law were repealed due to their violation of the Constitution, and the coastal legislation has been formed into its existing legislative status with some amendments in the Coastal Law No 3621 by virtue of the Law No 3830 in 1992.

However, the laws and regulations which were in effect during the Ottoman period and the first years of the Republic caused private ownerships to develop on the coasts under the guarantee of the government; that is, it is found when the Ottoman period is analyzed, that neither the Land Law nor the Ottoman Code of Civil Law has any provisions regarding the characteristics and legislative status of the coasts and prohibiting private ownership on the areas which are today called as coast. This situation gave way to development of private ownerships by means of lawful actions such as sales of lands formed through sea-filling, improvement and by natural reasons on the sea and river coasts. This also continued in first years of the Republic era. Although article 641 of the former Code of Civil Law of 1926 which was one of the first operations performed by the Republic era states, *"un-owned things and properties utilized by public are under the provision and possession of the government"*, and the coasts are regarded under such scope, no legislative regulation was devised to protect the coasts. Therefore, also during this period, private ownerships continued to develop until 1972, through sea-filling and drainage, improvement, cadastre procedures, and actions such as sale and administrative register

of the lands under the ruling and disposition of the government. In 1972, amendments in the Law No 1605 and the former Development (Zoning) Law No 6785 attempted to regulate the legislative status of the sea, lake and river coasts and prohibited reclamation for public ownership through sea-filling and swamp-draining (Şimşek 2010).

Due to the reasons cited above, identifying the private ownerships remained on the coast can only be determined through defining the exact borderlines of the coastal areas. In the conceptual sense, coast is where the land and water meet or is a section of the land extending along the water (Pala 1975). Moreover, coast can also defined as a land surrounding all types of water mass such as sea, lake and river. The Coastal Law, on the other hand, defines as the area between the shoreline and the Shore Border Line (SBL) (Akıncı et al. 2010). The shoreline; is defined as the natural line along which water touches the land at the coasts of seas, natural or artificial lakes and rivers, excluding the inundation periods, and the SBL as the natural limit of the sand beach, gravel beach, rock, boulder, marsh, wetland and similar areas, which are created by water motions in the direction of land starting from the coastline (Sesli et al. 2010).

SBL is established by the SBL Determination Committees in the Governorships and takes effect upon approval of the Ministry of Environment and Urbanization. In addition to being a legal mandate for any planning and application to be performed on the coast and coastline, the SBL determination, through its legalization, also bears significant legal consequences in terms of serving as a threshold which draws the border where the private ownership ends (Uzun and İnan 2010). With the determination of the SBL, it is quite significant that the real estates which remain on the coast should be identified and reclaimed for public use, thus enabling everyone to use the coast equally and freely, as the legislation mandates.

This significance becomes more and more important taking into consideration the Black

Sea coast which is 1685 km long, which extends from the Bulgarian border on the west through Georgian border on the north east. As may be known, in this region the coast is longitudinal with few indentations as the mountains run parallel to the coast. Therefore, the Black Sea coasts are generally rocky and steep (Gözenç et al. 1998). The coastline on the Eastern Black Sea is surrounded by sea on the front and by the mountains on the back which rise from the coast and reach up to 2000-2500 m height at short intervals of 50-60 km, and run parallel to the coast. These mountain ridges receive a lot of rain on the sides facing the sea, and are cut through rivers perpendicular to the coast and deep valleys, thus demonstrating an uneven terrain (Yüksek et al. 2007). It is of significant importance to enable use of the narrow and unique Black Sea coastline with such uneven terrain through better planning and equally by everyone.

As a result, although the existing legislation explicitly states that the coasts shall be exempted from the private ownership regime, there currently exist private ownerships given in the past under the guarantee of the government and dispositions gained based on such guarantee. Therefore, the current private ownerships which remained on the coast should be identified and reclaimed for public use as soon as possible. This study aims to identify and analyze the ownership profile and use of the coastal area on the coastline in Hopa district located on the Black Sea coast of Artvin Province.

### **Material and Methods:**

This study was conducted on the 27.1 km long Hopa coastline which extends from Sarp on the

country's northeast border through Arhavi district. The study area is comprised of 11 administrative units, including six villages (Çamlı, Sugören, Esenkıy, Liman, Üçkardeş and Sarp), four neighborhoods (Sundura, Merkez Kuledibi, Orta Hopa and Bucak), and Kemalpaşa town (Figure 1).

In the study, firstly, the SBL was identified in the study area, using 75 present time maps at a scale of 1:1000 obtained in digital format from the Directorate of Environment and Urbanization of Artvin Province. Secondly, based on the SBL, cadastral maps showing the real estates on the coastal area obtained from the Arhavi Cadastre Office, and the title information of the real estates were obtained from the Hopa Land Registry Office. Because they are produced in different coordinate systems, all of the cadastral maps were edited taking into consideration the Gauss Krüger projection, GRS-80 ellipsoid and ITRF96 datum. In the following phase, all spatial and non-spatial data obtained from relevant institutions were transferred into a database which was created in ArcGIS 10.0. Next, the pending and finalized litigation cases regarding the annulment of titles were obtained from the Hopa Revenue Directorate. Last, the sections of the real estates which remain on the coast (SBL infringing sections of real estates) were identified by superimposing the cadastral maps and SBL layer in ArcGIS 10.0 GIS, and the real estates on the coast area were analyzed in terms of ownership (e.g. private, public domain, and public institutions). Also, the study area was reviewed and the existing coastal usage was identified.

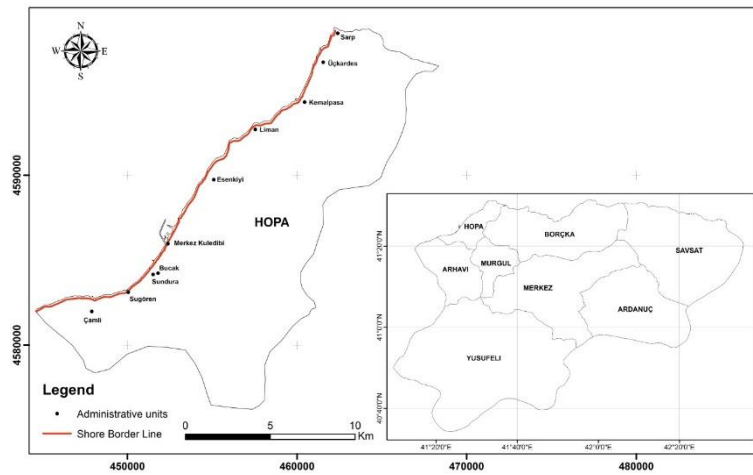


Figure 1. Location map of the study area.

## Results and Discussion:

As a result of the observations conducted under the study, it was found that the determination of SBL procedures were started in Hopa district in 1976, and fully completed in the year 2012 after the works conducted in segments in 1981, 1983, 2002, 2005, 2008, 2009 and 2010. Studies for the determination of SBL were started in 1975 across the country (Altın 2010) and are still continuing. 13 km of the SBL which was found to be 27.1 km long

during the study was recently defined and approved in 2012.

When the cadastral maps and title information pertaining to 11 administrative units located on the coastline of Hopa were analyzed, it was found that the first cadastre works were conducted in 1991 on the Merkez Kuledibi neighborhood, and that the cadastres of all units were completed at the end of 2012 with the last one being that of Liman village (Table 1).

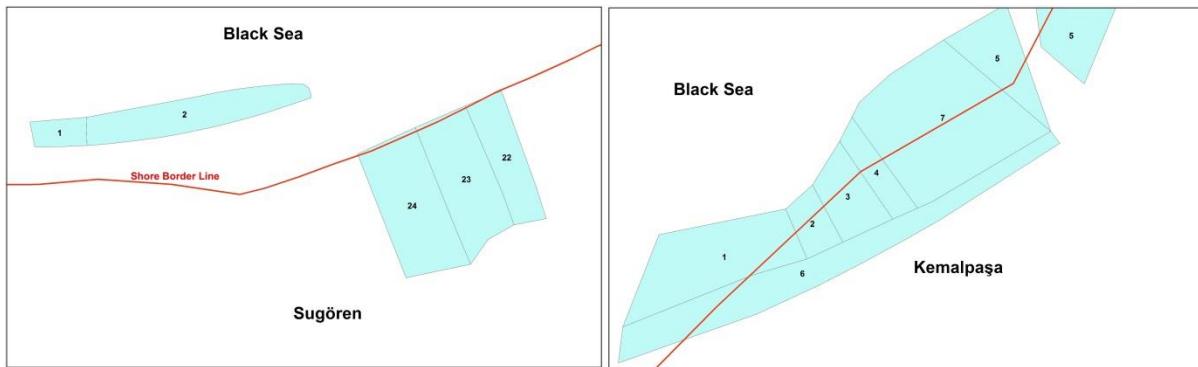


Figure 2. Examples of parcels infringing the SBL.

As a result of superimposing the SBL and cadastre maps, it was found that a total of 156 parcels were infringing the SBL, and that there was no infringement of the SBL in Liman and Üçkardeş villages (Table 1). Since out of the infringing 156 parcels, 17 had pending litigations cases, 4 were annulled by the court

decision (removed from the land title registry), and 4 were under the scope of the development plan implementation, the relationship between the rest of 131 parcels and the SBL were studied. Figure 2 shows some of the parcels infringing the SBL.

Table 1. The cadastre finalization dates and current statuses of the parcels on the coast

Name of the Unit	Neighborhood /Village	Date of first Cadastre Works	Number of the Infringer Parcels	Number of the Litigious Parcels	Annulment by Court Decree	Ongoing development plan application
Çamlı	Village	23.07.2010	23	14	-	-
Sugören	Village	28.12.2006	16	-	-	-
Sundura	Neighborhood	08.07.1999	4	2	1	-
Merkez Kuledibi	Neighborhood	27.09.1991	18	-	-	2
Orta Hopa	Neighborhood	24.10.2002	26	-	-	-
Bucak	Neighborhood	23.10.2003	9	-	-	2
Esenkiyı	Village	18.03.2005	30	-	3	-
Liman	Village	31.01.2012	-	-	-	-
Kemalpaşa	Town	06.10.1995	25	-	-	-
Üçkardeş	Village	07.05.2009	-	-	-	-
Sarp	Village	31.12.2010	5	1	-	-
<b>TOTAL</b>			<b>156</b>	<b>17</b>	<b>4</b>	<b>4</b>

As a result of the study, it was found that the highest number of infringements were in Orta Hopa with 225218.82 m<sup>2</sup> and the lowest in Sundura neighborhood with 80.70 m<sup>2</sup>. Also, 43% of the total surface area of the 131 parcels interrelated partially or completely with the SBL remained on the coast (Table 2). Similar studies on SBL-land ownership relation has been conducted in several coastal cities in our country, which have revealed that there are numerous real estates infringing the SBL. For example, in a study conducted in Samsun, 164

parcels with SBL infringement were determined on the coastal section of approximately 16 km with an SBL infringement of 40386.81 m<sup>2</sup> in total (Sesli et al. 2010); in a study conducted in Trabzon, on the other hand, 67 parcels were determined on the coastal section of approximately 10 km with an SBL infringement of 143651.93 m<sup>2</sup> in total (Sesli 2010) and it was observed that an action of the annulment of titles was filed for some parts of the aforesaid real estates and no action was filed for the other part.

Table 2. Areas and infringement amounts of the parcels infringing the SBL on the unit basis

Name of the Unit	Number of the Infringer Parcels Studied	Total Parcel Area (m <sup>2</sup> )	Amount of SBL Infringement (m <sup>2</sup> )
Çamlı	9	15448,27	362,98
Sugören	16	13657,14	5547,31
Sundura	1	1948,61	80,70
Merkez Kuledibi	16	14815,13	11507,78
Orta Hopa	26	238834,63	225218,82
Bucak	7	18394,11	8426,22
Esenkiyı	27	214548,94	21203,25
Liman	-	-	-
Kemalpaşa	25	133500,02	11249,20
Üçkardeş	-	-	-
Sarp	4	43690,62	16077,98
<b>Total</b>	<b>131</b>	<b>694837.47</b>	<b>299674.24</b>

When the real estates which remained on the coast were studied in terms of their characteristics, it was found that mostly cultivated lands and lots remained on the coast. When the real estates were analyzed in terms of their ownerships, it was found that 58% of them were owned by citizens and 32%

by the public domain (Table 3). The studies conducted in local areas which do not cover an administrative unit such as province or district show that the owners of the real estates which remain on the coast vary significantly depending on the characteristics of the area selected. For example, the study conducted by

Akyol and Sesli (1999) in two different pilot regions in Trabzon attained different results in term of the ownership of the parcels which remain on the coast. In Söğütlü town where there is dense housing development, 57% of the parcels infringing the SBL were owned by

citizens, 23% by the public domain and 13% by the public institutions while these figures are respectively 11%, 52% and 37% in Değirmendere-Yalincak where housing is still developing.

Table 3. Owners and characteristics of the parcels infringing the SBL on the basis of administrative unit

Name of the Unit	The Number of The Infringing Parcels investigated	Characteristics of the Infringing Parcel					Owner of the Infringing Parcel				
		Forest	Cultivated	Lot	Building and the lot	Other	Citizens	Public Domain	Local Admin.	Public Institution	Company
Çamlı	9	-	8	-	1	-	9	-	-	-	-
Sugören	16	3	3	-	4	6	7	9	-	-	-
Sundura	1	-	1	-	-	-	1	-	-	-	-
Merkez Kuledibi	16	-	-	4	11	1	7	6	1	-	2
Orta Hopa	26	-	1	8	16	1	19	5	-	1	1
Bucak	7	3	-	2	-	2	-	5	-	-	2
Esenkiyı	27	8	12	5	-	2	13	10	-	4	-
Liman	-	-	-	-	-	-	-	-	-	-	-
Kemalpaşa	25	-	9	10	4	2	18	6	1	-	-
Üçkardeş	-	-	-	-	-	-	-	-	-	-	-
Sarp	4	-	2	-	-	2	2	1	1	-	-
<b>Total</b>	<b>131</b>	<b>14</b>	<b>36</b>	<b>29</b>	<b>36</b>	<b>16</b>	<b>76</b>	<b>42</b>	<b>3</b>	<b>5</b>	<b>5</b>

When the use of the coastal areas of Hopa district was studied, it was found that the coastal areas were not used adequately and effectively, and that there existed inadequate usage in terms of quality in the area which had a high eco-tourism potential, such as agriculture, forest, housing, industry, harbor, park, beach, garbage and vehicle parking lots, military zones and fishermen cabins. One of the most significant reasons which prevent

achievement of effective use of the coastal area is primarily the Black Sea coastal roadway. The roadway which was built with sea-filling in some sections is distorted due to inclement climate, thus endangering the safety of life and property. Repair work is disrupting the traffic as well as demonstrating unfavorable visual scenery. Further, coastal roadway makes the accessibility to the coast difficult (Figure 3).



Figure 3. Repair works on the Black Sea coastal roadway.

The Hopa Port, being close to the Sarp border gate and with its high commercial capacity, is an important trade center in the study area. Although the Hopa Port is the gateway to the outer world, it is underused in terms of

tourism. The other areas underused in terms of tourism are the beaches. The widest and longest sand beach in the study area belongs to Kemalpaşa beach. Although Kemalpaşa beach is one of the busy spots in terms of



tourism, it is also observed to be below standards in terms of qualities as other

beaches used along the Hopa coast (Figure 4).



Figure 4. Scenes from the Hopa beaches.

The largest park area in the coastal area of Hopa district is found to be in the downtown area. Although there is sufficient usage area in the park which is being actively used, the park

is found to be not properly maintained. Another park area in the district is located by the Sarp border gate. The area which is densely used lacks sufficient design qualities (Figure 5).



Figure 5. Scenes from Sarp border gate and Hopa City Park.

### Conclusions:

Although the legislation currently in effect in our country states that the coasts are under the provision and possession of the government and cannot be the subject of private ownership, there have developed private ownerships on the coasts due to various problems experienced in practice. Coasts are areas which can be used by everyone equally and freely and which should be utilized on the basis of public welfare. Therefore, the real estates which remained on the coast should be identified, SBL infringing sections of these real estates should be annulled from the title, and their use for public welfare should be ensured. In this study, the real estates which remained on the coast of

Hopa were identified and their land uses were analyzed.

As a result of the studies, 156 real estates were found to be infringing the SBL on the coastline of Hopa. Except those which have pending litigations, were annulled by the court decision, are currently under the development plan application and land title registry of which has not been finalized yet, the relation between 131 real estate with the SBL were analyzed. The total area of the infringing sections of real estates was found to be 299674.24 m<sup>2</sup>. Also, it was found that 58% of the real estates were owned by citizens, 32% by the public domain and 0.04% by the public institutions.

During this study, we encountered some difficulties such as delays for obtaining data from the relevant institutions, the use of different coordinate systems in cadastral and present time maps. In addition, another obstacle causing time lag for this study was delays in updating the changes on the parcels resulting from the development plan applications. Therefore, completion and commissioning of the National Spatial Data Infrastructure which would enable sharing of the data and services among all interested parties involved in the spatial data is crucial for the management of the coastal areas, as for all other important applications.

In order for the coastal areas in Hopa to be used effectively and according to its potential, there are important steps to be taken including cleaning the waste areas (debris, soil and garbage) along the coastline, building waste water disposal areas in conformity with the standards, and considering the ecological balance during development plan applications.

In addition to the above, it is also concluded that Sarp border gate and Hopa harbor area should be enabled to enjoy qualities which would facilitate cultural exchange, are aesthetically adequate and possess an identity for the city, and developed to achieve adequate usage in terms of tourism. Lastly, it is also recommended that passage ways should be provided for the public to access the beach areas conveniently, the equipment in the beaches should be improved, activity areas (promenade, sports, food and beverage etc.) should be increased taking into consideration the capacity, the fishermen cabins should be offering more traditional line as they particularly have a great potential to be an important element of the coastal tourism, and redesigned to create opportunities for yacht tourism.

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